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Joseph Akwo Tabe

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EXAMINER

GOODEN JR, BARRY J

ART UNIT

PAPER NUMBER

3616

MAIL DATE

DELIVERY MODE

02/02/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                        |                                          |  |
|------------------------------|----------------------------------------|------------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/680,826   | <b>Applicant(s)</b><br>TABE, JOSEPH AKWO |  |
|                              | <b>Examiner</b><br>Barry J. Gooden Jr. | <b>Art Unit</b><br>3616                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 65-89, 93-95 and 104-110 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 65-89, 93-95 and 104-110 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                     |                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                         | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This office action is in response to the amendment filed November 24, 2009.  
Currently, claims 65-89, 93-95 and 104-110 are pending.

**1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.**

**A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450**

### ***Specification***

**2. There are three specifications filed on December 17, 2008. It is unclear what the applicant intended. There appear to be numerous changes that have not been properly amended (marked up) from the specification as originally filed or the specification as**

previously amended. The specifications filed are not properly ordered as detailed below. Furthermore, the specifications also appear to suggest that they comprise new subject matter as per the marked up designation (underlining). The applicant's newly filed specifications are replete with formatting errors and appear to include new matter. Applicant is advised to review the proper contents and order of a specification as detailed in a previous office action, again included below, and to accordingly submit an amended specification.

#### **Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

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- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR

1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

3. The amendments filed December 17, 2008 and November 24, 2009 are objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

**Any and all rational, reasoning, and support for the invention not included in the original disclosure** at the original date of filing should be removed. The sections of the specification that are considered new matter not originally filed and included in the newly submitted specification are "Field of the Invention", "Background of the Invention" and "Summary of the Invention". Should the applicant wish to keep these sections the subject matter included in them should be drawn solely from the originally filed specification as seen in the applicant's "Abstract", "Brief Description of the

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Drawings” and “Detailed Description of the Drawings” which comprised the applicant’s original filed specification.

At least all subject matter pertaining to “classification system”, an accelerometer comprising "at least a coil...", “energy harvesting methods...” and “EPROM includes an emulator” are new matter and should be cancelled from the specification.

4. Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Objections***

5. Claims 104, 105 and 107 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations of the claims are already included in the limitations of claim 65.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable

one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 65 recites, "adjusting a deployment unit"; however, this is not adequately disclosed in the specification to enable one of ordinary skill in the art. Piezoelectric accelerometers are used as the applicant claims in reverse, they are known as piezoelectric actuators; however as the piezoelectric crystals only produce movement on the micrometer scale to suggest that they are capable of compressing a spring far enough to produce a force to adjust a sliding dashpot has not been adequately disclosed by the applicant's specification to enable one of ordinary skill in the art. Moreover, adjusting a sliding dashpot in this manner would not produce any appreciable difference in inflation pressure as the sliding dashpot would be adjusted on the same scale as the piezoelectric actuator thus producing a negligible change in area through which the inflation gas would flow thus also leading to a negligible change in inflation as the gas would merely accelerate through the orifice before slowing back and inevitably equalizing pressure between the inflation area and the airbag. Applicant's assertion that the subject matter is enabled without any showing or reference to the specification is ineffective in overcoming the rejection.

Claim 65 recites, "comprises at least an erasable programmable read only memory"; however, this is not adequately disclosed in the specification to enable one of ordinary skill in the art. The equipment required to operate the erasable programmable read only memory is not disclosed by the applicant, for instance an ultraviolet light is not

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disclosed. Applicant's assertion that the subject matter is enabled without any showing or reference to the specification is ineffective in overcoming the rejection.

8. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Any subject matter drawn to emulators, accelerometer coils, energy harvesting, classification systems (the system does not perform any classification), piezoelectric coil, coil wound on at least a mass, energy being generated and silicon substrates should be removed from the claims as they are not supported by the specification as originally filed and are therefore new matter.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 65-89, 93-95 and 104-110 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claims 65-89, 93-95 and 104-110, the claims are replete with indefinite, functional and operational language. Several examples follow:

Claim 65 recites "a weight sensing unit" it is unclear from the claims and disclosure as to what this is referring to. Examiner suggest clarifying as the phrasing

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indicates the one unit may be positioned below more than one seat however the disclosure seems to suggest that the unit refers to a group of load cells positioned below a single seat. As such there would be "at least one weight-sensing unit ...beneath each at least one seat"; however, there is no clear indication in the claims or the disclosure to clarify one way or another.

Claim 67 recites "generating electrical energy"; however, the term "generating" renders the claim indefinite. Examiner suggests replacing the term with art acceptable terminology. The resistance element does not generate energy it merely changes a resistance according to strain.

Claim 68 recites "EPROM further comprises means for controlling weight data about a changing occupant at an address line configured for each seat and responsive for effectively controlling the classification data for at least a vehicle occupant"; however, it is unclear what is meant by the terminology as memory cannot by definition control data it is merely a means of storage and data is not stored at an address line as an address line is merely a means of locating data.

Claim 69 recites "for correcting said seat occupant's weight data at the address line when said data is influenced by at least an external force" renders the claim indefinite as "means for correcting" and the "at least an external force" are unclear. Further the occupant's data at the address line, should simply be the indicator for the computing unit as to which seat the data refers to, it is unclear what the means for correcting corrects or how changing the address line would affect the weight data of a specific seat.

Claim 69 "at least an emulator" renders the claim indefinite as it is unclear what is meant.

Claim 70 recites "emulator being operative configured...for generating a weight signal" renders the claim indefinite as it is unclear what is meant by the applicant.

Examiner reiterates that this is a listing of several examples not intended to completely detail each inaccuracy. The claims are replete with errors. Applicant is advised to perform a thorough revision of the claims, careful so as not to enter new matter.

11. Claim 65 recites the limitation "said one of said at least one seat". There is insufficient antecedent basis for this limitation in the claim. Examiner suggests replacing with "at least one seat". The applicant has amended the beginning of the claim to no longer provide antecedent basis and as such the issue remains.

Claim 65 recites the limitation "said weight measurements for each said seat" in lines 14 and 15 of the claim. There is insufficient antecedent basis for this limitation in the claim. This is due to only providing antecedent basis for one weight-sensing unit instead of at least one weight-sensing unit per seat.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

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at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 65-89, 93-95 and 104-110, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al., US Patent 5,413,378 in view of Turner et al., US Patent 5,956,703, and Mehney et al., US Patent 6,039,344.

In regards to claim 65-89, 93-95 and 104-110, Steffens, Jr. et al. discloses all of the claimed elements including a supplemental restraint system for a vehicle, comprising:

a weight-sensing unit (70) operatively secured beneath at least one seat (32) in said vehicle (Reference is made to column 3, lines 29-34 and Figure 1);

a computerized system (24) communicatively connecting said unit to a supplemental restraint system installed in said vehicle, said supplemental restraint system comprising at least one airbag system (120,104,88,102,80,150,110,103) each having at least one airbag, each said airbag system corresponding to one of said at least one seat;

said weight-sensing unit being configured for taking weight measurements, converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said computerized system;

said computerized system being programmably configured to calculate an operating weight value from said electrical signals corresponding to said weight measurements for each said seat and to communicate said operating weight value to said airbag system corresponding to said seat;

and for mechanically adjusting a deployment unit (120) within said airbag system to deploy said at least one airbag with a deployment force and acceleration for airbag inflation that are proportionate to said weight measurements (Reference is made to column 4, line 55 – column 5, line 3 and Figures 1-3).

Steffens, Jr. et al. does not disclose, “each said airbag system being electronically configured for receiving said operating weight value” the operating weight is not transmitted to the airbag system because the main computer system is configured to analyze the operating weight and transmit to the airbag system the amount the system needs to adjust for the occupant; rather than each system determining for itself the amount to adjust. Essentially the responsibilities of the network are arranged in a different manner.

Turner et al. discloses a network of ICs and a master processor wherein the ability to signal a driver circuit may reside with either an IC or the master processor. This teaches that a function may reside with either the central controller or a seat specific controller. As such it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to modify the supplemental restraint system of Steffens, Jr. et al. to include a seat specific computerized system programmably configured to receive an operating weight value, from the computerized system (24), and to mechanically adjust a deployment unit for a respective seat, so as to separate the responsibilities of calculating an operating weight and determining to what degree to mechanically adjust a deployment unit, thus freeing the main

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computerized system to continue calculating operating weights. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to provide the seat specific computerized system, as discussed above, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art.

Steffens, Jr. et al. does not disclose a weight sensor positioned between a seat mounting structure means and floor means.

Mehney et al. discloses a weight sensor positioned between a seat mounting structure (30) and a floor means (16). Teaching it is desirable to mount the weight sensor so as to not depend on the deflection of the seat cushion but rather on the entire magnitude of the occupant acting on the seat frame. As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to try to provide the weight sensor between the seat mounting structure means and the floor means, according to the teachings of Mehney and since it has been held that rearranging parts of an invention involves only routine skill in the art.

### ***Response to Arguments***

14. Applicant's arguments filed November 24, 2009 and claims filed November 24, 2009 have been fully considered but they are not persuasive.

Applicant's arguments directed to the supposed differences in the inventions are not persuasive and do not rectify the deficiencies of the claims, which define the scope

of the invention. The applicant's remarks are not commensurate with the claims or the rejection as formulated.

Furthermore arguments directed to the individual teachings of the references are not persuasive as they are a piecemeal analysis of the rejection rather than an analysis of the rejection as a whole including the motivation for the combination as made above.

Applicant's assertion of that "Mehney et al. is deficient and invalid" is unsubstantiated and ineffective in overcoming the prior art.

15. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450.

***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571)272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-7742. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Barry J Gooden Jr.  
Examiner  
Art Unit 3616

/BJG/

/Paul N. Dickson/  
Supervisory Patent Examiner, Art Unit 3616